Inside Wallops

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Goddard Space Flight Center
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WALLOPS ISLAND – 60 YEARS OF EXPLORATION

As the Sun slowly rises, a light fog begins to dissipate and sea gulls can be heard overhead. The ocean breaks along the beach. A light breeze dances across the sand. The morning begins on Virginia's barrier island formerly called Keeckotank, Accocomoson and Occocomoson.

Further down on the island, crews that have been at work since two in the morning go through the final steps to prepare a rocket for launch, just as they and others have done for the past 60 years— another day begins at America's oldest continuous rocket range – Wallops Island.

Wallops roots are based on this country's need for missile research during World War II. The Langley Aeronautical Laboratory in Hampton, Va. was tasked with supporting this research. A place was needed on the water, near Langley and near a military facility. Wallops Island fit the bill. The first test rocket was launched on June 27, 1945. The first research rocket, a Tiamat, was launched several days later on July 4.

After being established at Wallops, the focus of the Pilotless Aircraft Research Station expanded to include studying airplane designs at supersonic flight and gathering information on flight at hypersonic speeds. These tests included aircraft and missile designs from a variety of organizations and corporations including Douglas, McDonnell, Boeing, North American, Lockheed, and Grumman.

With the establishment of NASA in 1958, Wallops' role in the new space agency changed and it was renamed Wallops Station.

The station expanded in 1959 to include the Chincoteague Naval Air Station, which now is known as the Wallops Main Base.

Wallops played a key role in the development of the Mercury space capsule, the first step in the U.S. human space program. The basic design of the capsule and the escape system was tested at Wallops. In addition, the development of the SCOUT rocket was conducted at Wallops and the facility saw its first launch of a satellite into Earth orbit in 1964.

Tiamat:
The first research rocket launched from Wallops Island was a Tiamat on July 4, 1945.

The purpose of rocket launchings at Wallops became more focused on supporting science experiments of Earth's atmosphere and space. In addition, Wallops began to support science studies in countries throughout the world. One project included the launching of rockets from the deck of ship off the coast of Ecuador.

In the 1970s, Wallops expanded its research role as it became a NASA center and was renamed Wallops Flight Center. Aircraft began to be used as flying science platforms, conducting missions world-wide. Wallops played a key role in the development of using instruments for use on satellites to measure sea topography. Today, these instruments provide critical information on ocean phenomena such as El Nino.

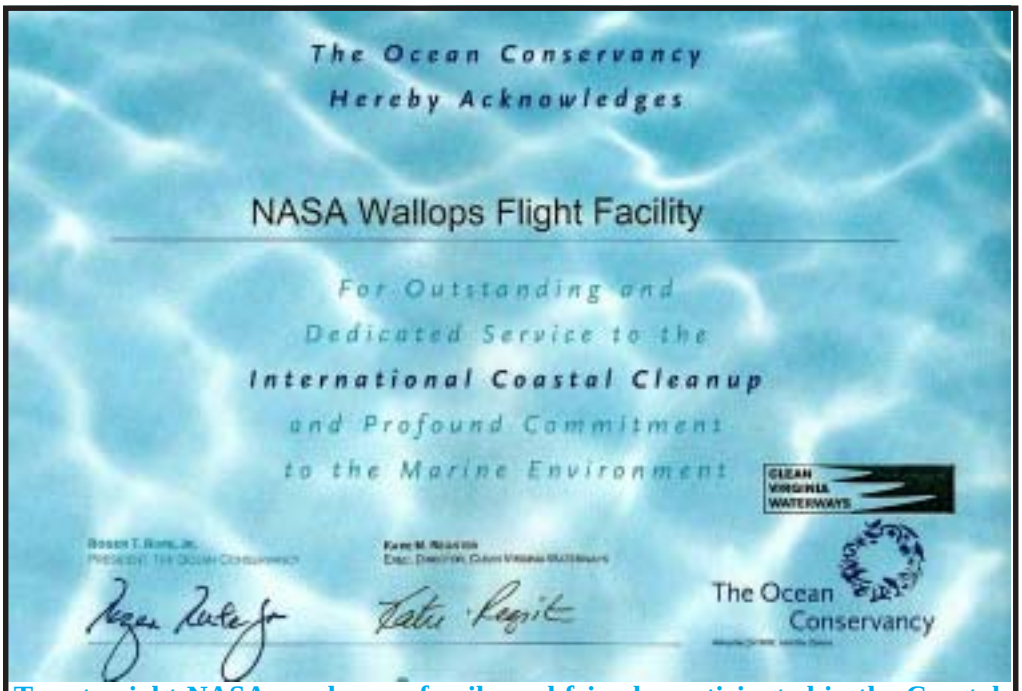
In 1981, Wallops became a part of the NASA Goddard Space Flight Center and was renamed the Wallops Flight Facility. This change brought additional mission responsibilities including the management of the scientific balloon program.

Today, the exploration efforts at Wallops are based on its 60 years of experience in conducting research using rockets, scientific balloons and aircraft. Sounding rockets continue to carry science instruments conducting space and Earth systems research. They also are being used to support rocket technology development including testing of new innovative rocket systems.

Research is being conducted to expand the use of scientific balloons on Earth and other planets. NASA is working to develop balloon systems to expand the current flight duration to more than 100 days. Also, balloons are being looked at as a means of carrying science instruments on planets such as Mars and Venus.

Aircraft research is expanding from traditional airplanes to include uninhabited aerial vehicles (UAVs).

Wallops scientists study the interaction between the oceans, atmosphere, and land. This includes researching the affect of global climate change on the world's ice sheets, providing accurate measurements of the topography of the oceans and land and developing systems to measure ocean microscopic plants and the role these plants have in the global carbon cycle.



Twenty-eight NASA employees, family and friends participated in the Coastal Cleanup on Saturday, September 17, picking up 1,356 pounds of trash on Wallops Island beach

60 years of exploration
NASA Wallops Flight Facility
1945-2005

Open House, October 1, 10 a.m. - 4 p.m.

Admission is free. No pets will be allowed. A valid driver's license will be required at the Gate. Employees will NOT be required to display a badge from 7 a.m. to 5 p.m. All parking is at the NASA ball fields just inside the Main Gate. The NASA 20 passenger bus and three trolleys will provide transportation to Buildings N-159, E-106 and F-10 on a continual loop. Roadblocks will go up at 9 a.m. and remain in place until 4 p.m. Employees entering the Main Base before 9 a.m. will not be allowed to pass the road blocks until they are taken down at 4 p.m.

1945 – 2005
NASA Wallops Flight Facility

From 1982 – 2005

Wallops is now NASA's principal facility for management and implementation of suborbital research programs.

Wallops' manages the NASA sounding rocket and scientific balloon operations. It also conducts observational Earth science studies, support aerospace technology development, provides aircraft flight services for scientific investigations, operates the Wallops Test Range and manages the Orbital Tracking Station.

Wallops is inspiring the next generation of explorers by providing opportunities for students in kindergarten through college to build and fly experiments on NASA flight vehicles. Sounding rockets, scientific balloons and other flight vehicles serve as platforms for thousands of students annually to experience and learn about space flight. In addition, 50 students in high schools and colleges across the United States spend their summer at Wallops as interns to gain valuable learning experiences in potential career fields.

Wallops Open House
October 1

Opening ceremonies for the day's activities will be at 10 a.m. (Bldg. N-159) with the Navy Color Guard, the Voice's of Wallops and Wallops Senior Manager, Dr. John Campbell and Past Wallops Directors, Dr. Arnold Torres and Warren Keller.

While Building N-159 will serve as the hub for activities, the Control Center, (Bldg. E-106) and the Machine Shop, (Bldg. F-10) also will be open for tours and activities. The N-159 hangar will house exhibits that showcase NASA Wallops and the many organizations that use the Facility.

Non-NASA exhibitors will include the Navy, NOAA, the Federal Credit Union, ATK, CI Travel, Old Dominion University, Computer Sciences Corporation, Delmarva Area Rocketry, Northrop-Grumman, Honeywell, LJT, Lockheed Martin, Marine Science Consortium, Maryland/Delaware Rocketry Association, Mid-Atlantic Regional Spaceport, National Federation of the Blind, OSB Oasis, SGT, Inc., Swales, The Nature Conservancy, U.S. Fish and Wildlife, Virginia Space Flight Academy, VT Griffin, and a Wallops history exhibit.

The U.S. Coast Guard sponsored Bush car of Justin Labonte, Navy target drones, an inert NASA sounding rocket along with a host of Unmanned Aerial Vehicles will be outside the N-159 hangar.

A kid's activity room, K-9 demonstration by the Accomack County Sheriff's Office, and a fly-by of Virginia Air National Guard F-16 aircraft currently scheduled between 10:15 and 10:30 a.m. are only part of the festivities.

Aircraft that use the Wallops airfield also will be on display. These include NASA, Department of Defense, and Maryland and Virginia State Police aircraft.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov
Editor Betty Flowers
Asst. Editor Rebecca Hudson